Mr. Streets describes the following new species, giving Isthmus of Panama as their locality:

Mithraculus coronatus.

Aniculus longitarsis.

Cenobita intermedia. Gebia longipollex.

Alphæus bispinosus.

The following species included in his list are Atlantic forms, some of which may possibly occur in the Pacific, also:

Mithraculus coronatus, St		Gul	f of Mexico, Brazil.
Carpilius corallinus, M. Edwards	s		Antilles.
Actwa labyrinthica, St.?			
Menippe mercenaria, St			
Lupa rubra, M. Edwards			Brazil.
Ocypoda rhombea, M. Edwards			Antilles, Brazil.
Uca lævis, M. Edwards			Antilles, Brazil.
Hippa emerita, M. Edwards			Antilles, Brazil.
Cenobita diogenes, M. Edwards			Antilles.
Panulirus guttatus, Latn. M. Ed	lwards		Antilles.
" americanus, Lamk. M	I. Edwards		Antilles.

The following probably reach as far north as Panama, and are therefore referred to in their order:

- 1. Panopæus chilensis.
- 4. Ocypoda Gaudichaudii.
- 2. Lupa dicantha.
- 3. Eriphia gonagra.

# W. N. Lockington read the following:

#### Notes on Californian Fishes.

BY W. N. LOCKINGTON.

Raia batis. Linn.

Uraptera binoculata. Girard.

Dr. A. Gunther, in the Cat. Fishes Brit. Mus., Vol. VIII, p. 465, states his belief that the latter of these fishes may be regarded as a climatic variety of *R. batis*. He goes on to say that "young examples have a round obscure spot on each pectoral fin."

Had Dr. Gunther seen the fish alive, or in a fresh condition, I think that his opinion would have been different, but, as the Catalogue shows his only specimens were young, one from San Francisco, presented by Dr. W. O. Ayres, the other a skin only, presented by J. Keast Lord, from Vancouver Island.

I have myself seen specimens of large size in which the spot is as distinct as in the young, and though I cannot say I have measured them, I feel assured that one I saw in the aquarium at Woodward's Gardens about a year ago was two feet across the fins; and that the one now there is about eighteen inches.

Moreover, the eye-like spot in the centre of the pectoral is anything but obscure in the recent fish, it is most conspicuous.

But this is not all. We have in our possession a fish (caught in San Francisco Bay,) which agrees in every respect with the description of *R. batis* in the Brit. Mus. Cat.

I subjoin the dimensions-

	INCHES.
Width across pectorals	18.38
Tip of snout to centre of posterior jaw	4.12
" anterior edge of anus	
" " orbit	4.12
Tail to back of ventrals	8.75
Inter-orbital space (width of)	1.37
Width across ventrals	7.50

Body and fins of a uniform slaty brown color. The difference in a spect between this fish and the Uraptera or  $Raia\ binoculata$  is very great.

## Centropomus. Sp.?

Body oblong, compressed; head contained four and a half times in the total length; outline of top of head nearly straight, slightly concave, ridges of upper surface prominent; depth increasing to origin of first dorsal, thence nearly equal to root of second dorsal, thence decreasing gently to peduncle of tail. First dorsal with eight spines—the first minute; the second about one-sixth the length of the third; third, longest, very stout; fourth, fifth, sixth and seventh rapidly decreasing; eighth, prostrate. Pectorals small, extending to little more than the half length of the ventrals, which exceed them in size. First spine of anal very small; second, long and stout; third, slender, but slightly the longest. The orbit is slightly elliptical. Lower jaw protruding beyond the upper; maxillary, when the mouth is closed, extending to a perpendicular from the centre of the pupil. Teeth nominal. Pre-operculum strongly serrated. Color, when fresh, back to lateral line dark green, becoming lighter below, and whitish on the belly. Snout, green, yellow on the sides. Iris, golden. Pectorals, lead-color, with green centre; ventrals, the same. Caudal, lead-color in centre, with green margins. Dorsal, green, with bluish stripe, and tipped with golden. Fin-formula, D. 8 1 1.6; A. 3. Branchiostegals, 7. The following are the principal dimensions of the specimen presented:

· · · · · · · · · · · · · · · · · · ·	Ft.	In.
Total length, from tip of lower jaw to end of tail	. 1	5.5
Length of head, from tip of upper jaw		3.88
Tip of snout to origin of first dorsal		5.5

Origin of first dorsal to origin of second dorsal	3.35
Length of third dorsal spine	2.25
Length of base of first dorsal	2.75
Length of base of first anal	1.5
Eye to tip of snout	1.3
Circumference at origin of spinous dorsal	7.5
Width of inter-orbital space	0.63

The single specimen was taken by Mr. W. J. Fisher, off Asuncion Island, Lower California, at a depth of eight fathoms.

The proportions and coloration of this fish agree very nearly with those of Centropomus undecimalis, Cuv. and Val.; and I strongly suspect its identity with that species, which is, however, not known to me from specimens or figures.

C. undecimalis is a native of the Atlantic shores of tropical America; but Dr. Gunther queries its occurrence at Lima. If it should prove, on further acquaintance, to be a distinct species, I propose to name it Centropomus viridis.

# Dr. Kellogg submitted the following:

### On some New Species of Californian Plants.

#### BY DR. A. KELLOGG.

Dr. G. Eisen's specimens of Carpenteria Californica in full flower enable us to record some further items of interest. In these the flowers are pure white, fragrant, 2-2½ in expansion; bracteoles ovate, acute, instead of "subulate," only ½ inch below the flower, and as the central peduncle has none, under high culture, it is fair to presume these would prove only reduced normal leafy bracts; the petioles are connate at base, often shortly sheathing. The flattened cymosely-pannicled masses of flowers show it to be a more compact bloomer than our Philadelphus species, which it so much resembles; the intermixture of buds with the open flowers also indicate a lengthened period of bloom. This must prove a most valuable ornamental acquisition.

In Dr. Eisen's collection we also find a new species of Blazing Star, or Mentzelia crocea. K.

Annual (?) stem branching two feet or more high, bark white, ashy puberulent and seabrous, hirsute with rather long white simple hairs above, leaves oblong, pinnatifid, lobed, upper ovate-lanceolate, acuminate, sessile, sinuate-pinnatifid or toothed; flowers axillary and terminal; subtending bracts ovate-acuminate, coarsely toothed or sub-lobed. (1–2 on each side.)

Capsule, slender, clavate or gradually enlarging above to the truncate top; sessile, hirsute, an inch or more long; immature seeds, flat. Calyx segments ovate-lance-acuminate—half the length of the stamens, or about  $\frac{1}{2} - \frac{1}{2}$  the petals; hairs on the back from conspicuous elevated gland-like bases; petals, five, oval or oval-oblong, abruptly short-acuminate, golden satiny yellow, on a very short saffron-colored claw; flowers large  $(2-2\frac{1}{2})$  inches across); stamens